PHORADENDRON RUBRUM IN FLORIDA

Dr. Frank C. Craighead, on low-flying flights over the northern keys of Monroe County, Florida, observed on mahogany trees, *Swietenia Mahagoni* Jacq., a parasite which appeared to kill gradually the over-mature hosts. In the company of Doctors John Popenoe and Carl W. Campbell, of the Subtropical Agricultural Experiment Station, Homestead, Dr. Craighead, searching on North Key Largo, found a tree on which the parasite was growing low enough to be reached. The plant proved to be *Phoradendron rubrum* (L.) Grisebach, a species known from Cuba and the Bahamas, where it has been found only on *Pithecellobium* and *Bursera*, according to labels on specimens in the Gray Herbarium.

The mahogany trees on which Dr. Craighead has observed *Phoradendron rubrum* have been practically always large specimens, two to four feet in diameter and twenty or more feet to the lowest limbs. On the higher branches the mistletoe forms large masses two to three feet in diameter, very conspicuous in winter when the hosts shed their leaves. Dr. Craighead reports that recently-dead trees, seen from a plane fifty feet above them, were covered with dead or dying mistletoe, indicating that the parasite may play a part in killing the trees. He writes, "There are very few of these big mahoganies left on Key Largo. Some occur on Rhodes and Sand Keys just to the north. The mistletoe is here also from what I could make out in flying over. These mahoganies are the remnants of a fine stand that has been depleted over the past thirty to fifty years. Most of them are defective and for that reason were left. They occur in the hammocks of these keys and on a narrow coastal strip from Flamingo to US highway 1 on the tip of the peninsula. On the keys the mahoganies grow on coral rock; on the mainland on marl soil or oölitic limestone, the largest trees on the latter."

Specimens of *Phoradendron serotinum* (Raf.) M. C. Johnston *(P. flavescens)* in the Gray Herbarium indicate Lee County, Florida, as the southern limit of its range, a location one hundred miles northwest of Key Largo. It can be distinguished quickly from *P. rubrum* by its whitish berries

and terete internodes and, upon more critical examination, by the lack of cataphylls.

Phoradendron rubrum (L.) Grisebach, Fl. Br. W. Ind. 314. 1864. *Viscum rubrum* L., Sp. Pl. 1023. 1753.

Parasitic, evergreen shrub; stems and branches ligneous, furrowed in drying; sections of the branches with pairs of basal, broad and spreading, often connate cataphylls, and rarely with one or two additional pairs upward, particularly on new growth; these sections 8 to 32 mm., furrowed when dried, terete at base, two-edged and flattened upward with a 90° tortion from base to apex; leaves elliptical, spatulate to obovate, mostly cuneate at the base, short-petioled, caducous on drying and at death of plant; veins few, prominent, pinnate, branching; inflorescence axillary, spicate; spikes elongating through a series of cup-like bracts, monoecious, with trimerous flowers, the staminate flowers above, berries globose, glabrous, about 4 mm. in diameter, lemon to light orange in color.

Specimens cited: FLORIDA. Key Largo, Monroe County, growing on mahagoni in hammocks, berries orange, 19 April 1941, *J. M. Crevasse* (FLAS); South end of Key Largo, Monroe County, on large Swietenia Mahagoni in hammock, berries orange, 6 February 1944, *S. J. Lynch* (FLAS); Key Largo, Monroe County, on Swietenia, berries pink to orange, March 1953, *Ray Garrett* (FLAS, GH); North Key Largo, Monroe County, on Swietenia Mahagoni, 2 February 1963, *Frank C. Craighead, Carl W. Campbell* and *John Popenoe* (GH, USF).

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